Appl. No. 10/734,855
Amdt. dated December 8, 2005
Reply to Office action of September 30, 2005

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A system, comprising:

a bridge;

a slot into which an add-in card having one of a plurality of types can be installed, said slot coupled to the bridge; and

a power control unit coupled to the slot via a common power rail and coupled to the bridge;

wherein, after installing the add-in card, the bridge determines the type of add-in card installed and asserts a logic signal to the power control unit and wherein, based on the logic signal, the power control unit provides one of a plurality of direct current ("DC") voltages on the common power rail to the slot; and

wherein the power control unit receives a power good ("PGOOD") signal that indicates whether a power state of the system is functional and the power control unit delays the assertion of the PGOOD signal relative to the logic signal.

2. (Currently amended) The system of claim 1 ~~further comprising a power good ("PGOOD") signal that is asserted to the power control unit, the PGOOD signal indicates whether a power state of the system is functional and~~ wherein the power control unit delays the assertion of the PGOOD signal relative to the logic signal to permit the logic signal time to equilibrate.

3. (Original) The system of claim 1 wherein the plurality of DC voltages comprises 1.5 VDC and 3.3 VDC.

4. (Original) The system of claim 1 wherein the power control unit causes the common power rail to be initially at a ground potential during system initialization.

5. (Original) The system of claim 4 wherein the power control unit comprises a first power transistor that is adapted to provide a first DC voltage onto the common power rail and a second power transistor that is adapted to provide a second DC voltage onto the common power rail, wherein the first and second transistors are individually selected in response to the logic signal asserted by the bridge.

6. (Original) The system of claim 1 wherein the add-in card comprises a PCI-X-compliant card.

7. (Original) The system of claim 1 wherein the add-in card can be installed while the system is powered on and operational.

8. (Currently amended) A power control unit adapted to be installed in a system and configurable to provide one of a plurality of voltages on a common power rail to a load, comprising:

a time delay;

a first power switch that is adapted to provide a first voltage to a load over a power rail;

a second power switch that is adapted to provide a second voltage to the load on the power rail; and

wherein the first power switch and the second power switch are responsive to a logic signal specifying whether the first power switch or the second power switch is to provide the first voltage or the second voltage, respectively, on the common power rail to the load; and

wherein said time delay delays assertion of a power good signal that indicates whether a power state of the system is functional.

9. (Original) The power control unit of claim 8 further comprising:
a first logic gate coupled to the first power switch;
a second logic gate coupled to the second power switch; and
an inverter coupled to the second logic gate;
wherein the logic signal is provided to the first logic gate and to the inverter and wherein the inverter provides an inverted form of the logic signal to the second power switch.

10. (Currently amended) The power control unit of claim [[7]] 9 wherein the ~~power control unit is adapted to be installed in a system, and the power control unit further comprises a~~ time delay is coupled to the first and second logic gates~~, said time delay delays assertion of a power good signal that indicates whether a power state of the system is functional~~.

11. (Original) The power control unit of claim 10 wherein the time delay delays assertion of the power good signal until after the logic signal has had time to equilibrate.

12. (Original) The power control unit of claim 8 wherein the power switches cause the voltage on the power rail to be at a ground potential at system initialization.

13. (Original) The power control unit of claim 8 wherein, during system power down, the power control unit actively prevents both the first and second power switches from supplying voltage to the common power rail.

14. (Currently amended) A system, comprising:
a slot into which an add-in card that comports with one of a plurality of types can be installed, said slot coupled to the bridge;
a bridge that is adapted to determine the type of add-in card installed in the slot; ~~and~~

means for causing a voltage on a power rail to a load to be at a ground potential and for subsequently causing the voltage on the power rail to transition to one of a plurality of voltages depending on the type of add-in card installed in the slot; and

means for delaying assertion of a power state signal relative to a logic signal that specifies to which of the plurality of voltages the voltage on the power rail is to transition.

15. (Original) The system of claim 14 wherein the plurality of voltages comprises 1.5 VDC and 3.3 VDC.

16. (Canceled).

17. (Currently amended A method, comprising:
determining a type of card installed in a system;
delaying assertion of a power good signal that indicates whether a power state of the system is functional; and
following the delay of said power good signal, selectively providing one of a plurality of voltages on a single power rail to the card based on the type of card.

18. (Original) The method of claim 17 wherein selectively providing one of a plurality of voltages comprises turning on a first power transistor or a second power transistor, the first power transistor configured to provide a first voltage on the power rail and the second power transistor configured to provide a second voltage on the power rail.

19. (Original) The method of claim 17 wherein selectively providing one of a plurality of voltages comprises selectively providing either 1.5 VDC or 3.3 VDC.

20. (Original) The method of claim 17 further comprising forcing the voltage on the power rail to a ground potential during at least a portion of initialization of the system.